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U.S. Patent a Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection  PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
THE ATTENED MEDITION NEW	,	10006278-1	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail	Application Number 09/879,168		Filed
in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]			06/13/01
on 10 09 106	First Named Inventor Pere Obrador		
Signature Wille ##			
	Art Unit 2621		Examiner
name Desiree Reardon	20	)21	Lee, Y. Y.
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed			
with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.			
I am the		•	
applicant/inventor.		$\overline{}$	
assignee of record of the entire interest.	Signature John P. Wagner Jr.		
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		Typed or printed name	
X attorney or agent of record. 35,398	408-938-9060		
Registration number	Telephone number		
attomey or agent acting under 37 CFR 1.34.	.1.100		
Registration number if acting under 37 CFR 1.34			
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NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
*Total of forms are submitted			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.** 

## Remarks Accompanying Pre-Appeal Brief Request For Review

In response to the final Office Action dated July 11, 2006, Applicant respectfully requests a review of the final rejection in the above-identified application. Applicants respectfully submit that the Examiner's rejections of the Claims 1-20 under 35 USC 102(b) as being anticipated by Talluri et al (6,026,183) is improper as an essential element needed for a proper prima facie rejections is missing (e.g., the teaching of all of the recited claim limitations).

## Rejection under 35 U.S.C. §102 (b)

## KEY CLAIM LIMITATIONS THAT ARE NOT MET BY THE CITED REFERENCES

Claim 1 is directed to a method for applying multi resolution boundary encoding to region based still image and video encoding including:

"dividing an original image into a plurality of regions, wherein a plurality of boundaries associated with the plurality of the regions is detected;

encoding each of the plurality of the boundaries, whereby each of the plurality of the boundaries contains different resolution coefficients."

Claims 11 and 14 recite limitations similar to those recited in Claim 1. Claims 2-10 depend from Claim 1, Claims 12-13 depend from Claim 11, and Claims 15-19 depend from Claim 14 and recite further limitations of the claimed invention.

In the final Office Action, the Examiner has referenced section 8 of the previous office action, paper number 4, dated 2/11/03 as the location of the rejection of Claims 1-20 under 35 U.S.C. §102(b) as being anticipated by Talluri et al. The Applicant respectfully disagrees with the Examiner. That is, the Applicant does not understand Talluri et al. to anticipate the features of Claims 1, 11 and 14.

According to the Federal Circuit, "[a]nticipation requires the disclosure in a single prior art reference of each claim under consideration" (W.L. Gore & Assocs. v. Garlock Inc., 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Applicant understands Talluri et al. at column 11 lines 35-55 to teach and anticipate applying the transform method to regions of interest, not just homogeneous

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Serial No.: 09/879,168 Group Art Unit: 2621 regions which fill up the entire frame. Moreover, at Column 12 lines 12-17, Applicant understands Talluri et al. to teach and anticipate after decomposition, the encoder only sends information about values that lie within the subregions of interest to be coded. (emphasis added)

In contrast, the present features clearly state "dividing an original image into a plurality of regions, wherein a plurality of boundaries associated with the plurality of the regions is detected; encoding each of the plurality of the boundaries, whereby each of the plurality of the boundaries contains different resolution coefficients." That is, the original image is divided and each of the plurality of boundaries is encoded. The present features do not limit the image encoding to "a region of interest" but instead focus on homogeneous regions which fill up the entire frame.

For this reason, Applicant respectfully submits that Talluri et al. is missing an essential element needed for a proper prima facie rejection. As such, Applicant respectfully submits the rejection under 35 U.S.C. §102(b) is improper and should be reversed.

Additional arguments provided on pages 8-11 of the RCE and preliminary amendment response to the Final Office Action dated August 05, 2003 are also referenced.

In addition, Claim 1 also includes the feature:

"decomposing each of the plurality of the regions in the original image into one or more subbands using a plurality of the boundaries with the highest resolution coefficients selected from among the plurality of boundaries that are detected;

successively decomposing each of the plurality of the regions in a subband with lower resolution coefficients into one or more subbands using the plurality of the boundaries with lower resolution coefficients."

Claims 11 and 14 recite limitations similar to those recited in Claim 1. Claims 2-10 depend from Claim 1, Claims 12-13 depend from Claim 11, and Claims 15-19 depend from Claim 14 and recite further limitations of the claimed invention.

10006278-1 Examiner: Lee, Y. According to the Federal Circuit, "[a]nticipation requires the disclosure in a single prior art reference of each claim under consideration" (W.L. Gore & Assocs. v. Garlock Inc., 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Applicant understands Talluri et al., at column 11 lines 4-7 and 35-38, to teach and anticipate performing wavelet transformations by successive stages of decomposition of an image. The transformations preferably only encode regions in the subbands which correspond to original regions of interest in the original image. FIGS. 10a-c heuristically illustrate how regions appear in the subband filtered outputs. This approach avoids spending bits outside of the regions of interest and improves video quality. The specific use for motion failure regions is a special case of only encoding regions of interest.

In contrast, the present features clearly state "dividing an original image into a plurality of regions, wherein a plurality of boundaries associated with the plurality of the regions is detected; encoding each of the plurality of the boundaries, whereby each of the plurality of the boundaries contains different resolution coefficients."

For this additional reason, Applicant respectfully submits that Talluri et al. is missing an essential element needed for a proper prima facie rejection. As such, Applicant respectfully submits the rejection under 35 U.S.C. §102(b) is improper and should be reversed.

Additional arguments provided on pages 6-7 of the response to the Office Action dated February 11, 2003 are also referenced.

In addition, Claim 1 also includes the feature:

"transmitting boundary information associated with regions of the original image and image information with the lowest resolution coefficients; and

successively transmitting boundary information associated with regions of the original image and image information with higher resolution coefficients."

Claims 11 and 14 recite limitations similar to those recited in Claim 1. Claims 2-10 depend from Claim 1, Claims 12-13 depend from Claim 11, and Claims 15-19 depend from Claim 14 and recite further limitations of the claimed invention.

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According to the Federal Circuit, "[a]nticipation requires the disclosure in a single prior art reference of each claim under consideration" (W.L. Gore & Assocs. v. Garlock Inc., 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983)). However, it is not sufficient that the reference recite all the claimed elements. As stated by the Federal Circuit, the prior art reference must disclose each element of the claimed invention "arranged as in the claims" (emphasis added; Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)).

The Office Action states that Figure 15a and 15b are analogous to the claimed features of "transmitting boundary information associated with regions of the original image and image information with the lowest resolution coefficients; and successively transmitting boundary information associated with regions of the original image and image information with higher resolution coefficients." However, Applicant respectfully disagrees.

Applicant understands Talluri et al., at column 18 lines 23-60, to teach and anticipate <u>error correction</u> utilizing two Reed-Solomon Coders (emphasis added).

In contrast, the present features clearly state "transmitting boundary information associated with regions of the original image and image information with the lowest resolution coefficients; and successively transmitting boundary information associated with regions of the original image and image information with higher resolution coefficients."

Applicant respectfully submits that Talluri et al. is silent with respect to transmitting boundary information associated with regions of the original image and image information with the lowest resolution coefficients; and successively transmitting boundary information associated with regions of the original image and image information with higher resolution coefficients (emphasis added).

For this additional reason, Applicant respectfully submits that Talluri et al. is missing an essential element needed for a proper prima facie rejection. As such, Applicant respectfully submits the rejection under 35 U.S.C. §102(b) is improper and should be reversed.

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Additional arguments provided on pages 8-11 of the RCE and preliminary amendment response to the Final Office Action dated August 05, 2003 are also referenced.

Regarding Claims 2-10, 12-13 and 15-20, Applicant respectfully submits that Claims 2-10, 12-13 and 15-20 are also allowable as pending from allowable base Claims and reciting further features of the Claimed invention.

In summary, Applicant respectfully submits that the Examiner's rejections of the Claims are improper as key limitations needed for proper prima facie rejections of Applicants' Claims are not met by the cited reference as outlined above. Moreover, because key limitations of independent Claims 1, 11 and 14 (from which Claims 2-10, 12-13 and 15-20 pend) are not anticipated by Talluri et al., Applicant respectfully submits that the rejection of Claims 1-20 under 35 U.S.C. §102 (b) as being anticipated by Talluri et al. is improper and should be reversed.

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